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09/727,953	11/30/2000	Guy McIlroy	PALM-3281.US.P	5875

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BERRY & ASSOCIATES P.C.
9229 SUNSET BOULEVARD
SUITE 630
LOS ANGELES, CA 90069

EXAMINER	
KHOSHNOODI, NADIA	
ART UNIT	**PAPER NUMBER**
2437	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/727,953	MCILROY, GUY	
	Examiner	Art Unit	
	NADIA KHOSHNOODI	2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 November 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 May 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claims 2-3 have been cancelled. Applicant's arguments/amendments with respect to the pending claims filed 11/23/2009 have been fully considered but are not persuasive. The Examiner would like to point out that this action is made final (See MPEP 706.07a).

Election/Restrictions

This application contains claim 22-28 drawn to an invention nonelected with traverse in the reply filed on 12/23/2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Response to Arguments

In response to Applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicants contend that "Brody does not provide for validating any software in a secure environment as claimed." Examiner respectfully disagrees. First, Examiner would like to point out that Brody et al. was not relied upon to meet the limitation of scanning the software before

downloading it to the PDA. Brody et al. was introduced since Muttik et al. did not explicitly state that the method claimed comprises a portable computing device coupled to the host computer. Brody et al. was furnished in order to suggest that PDAs may be used to load information/applications from a host computer/network (par. 33). Also, Brody et al. additionally provide, in the disclosure, that it was commonly known to scan software applications to protect the user from possibly malicious effects of software that is untrusted (par. 105). Finally, Applicants claims merely call for the inclusion of a portable computing device and a host within the open platform system. In other words, there is no specific limitation that defines which of the two elements (from the host and the portable computing device) performs which functions claimed within the open platform system in a manner that would overcome the prior art of record. Thus, the combination of Muttik et al. and Brody et al. teach the claimed limitations.

Furthermore, in response to Applicant's argument that Brody teaches away since Brody et al. sought to utilize personalization of software, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Brody et al. explicitly states that the prior art used personalization for software scanning in order to protect from downloading malicious code, as opposed to for protecting the software publisher (par. 105). Thus it is clear that Brody et al. recognized the need of taking this personalization one step further to also protect software publishers. However, for

the purposes of the claimed invention, Examiner reiterates, Brody et al. was introduced to provide a proper combination with Muttik et al. since Brody et al. disclosed the use of a portable computing device coupled to a host computer within an open platform system and additionally suggested that it was known for personalization to be used for authenticating the software to prevent from the downloading of malicious code (par. 105).

Still further, Examiner would like to note that, in view of *KSR,* the Supreme Court emphasized that there is a "need for caution in granting a patent based on the combination of elements found in the prior art," *Id.* at 1739. The Supreme Court also reaffirmed principles that the "combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." Examiner would also like to note in light of *KSR* that since Brody et al. recognized that personalization (in the prior art before the invention disclosed by Brody et al.) could be used to authenticate the software itself, it is clear that one of ordinary skill in the art at the time the invention was made could recognize the importance of including personalization for software authentication purposes to protect a user from downloading malicious code within an open platform environment containing a host computer coupled to a portable computing device (par. 105).

Finally, in response to Applicant's arguments against the references individually, namely attacking Brody et al. for failing to teach/suggest scanning/validating software in a secure environment, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In this case, Applicants make no mention of Muttik et al. teaching/failing to teach the limitation in question where Examiner clearly relied upon Muttik et al. for this particular limitation.

Due to the reasons stated above, the Examiner maintains rejections with respect to the pending claims. The prior arts of records taken singly and/or in combination teach the limitations that the Applicant suggests distinguish from the prior art. Therefore, it is the Examiner's conclusion that the pending claims are not patentably distinct or non-obvious over the prior art of record as presented.

Claim Rejections - 35 USC § 103

I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

II. Claims 1, 4-5, 7-13, 15-18, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muttik et al., US Patent No. 6,907,396 and further in view of Brody, US Pub. No. 2001/0051928.

As per claim 1:

Muttik et al. teach a method of ensuring the security of an open platform computer system, comprising loading software suitable for operating on an open platform computer system in a secure environment on the open platform computer system (col. 3, lines 50-52) comprising the host facility (col. 3, lines 54-62); upon loading the software on the open platform computer system, validating the software by the use of a validator program residing in the open platform

computer system in a secure fashion such that the validator program scans the software that is loaded in a secure environment (col. 4, lines 4-23); wherein the act of scanning and validating comprises running the code in an emulator for the open platform computer system within the secure environment for the emulator to run in, allowing the execution of the code to be examined for any new malicious routines as well as against known malicious signatures (col. 4, lines 4-23); marking the software as valid or invalid by the use of a flag (col. 4, lines 39-52 and col. 5, lines 15-19); and, denying the software the ability to operate on any environment within the computer system if said validator fails to identify the software as valid in order to ensure the security of the open platform computer system (col. 2, lines 64-67). Although an "open platform" is not specifically discussed, Muttik et al. do not teach that the system is limited to a particular type of software. Muttik et al. teach that any software received and potentially malicious is analyzed, thus Muttik et al. support an "open platform computer system" for performing the above mentioned steps.

Not explicitly disclosed is wherein said method operates on a computer system which comprises a portable computing device coupled to the host computer. However, Brody teaches a PDA coupled to a host device for personalization purposes. Furthermore, Brody et al. teach that one of the steps during the personalization process may be to scan the software before allowing it to be downloaded to the PDA to prevent from downloading an application with malicious code (par. 105). Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Muttik et al. to have the hand-held device coupled to the host computer in order to carry out different functions on the portable device, where one of the functions includes the PDA having a validation program stored in a secure fashion in order to

scan the software. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Brody suggests that PDA's are used in conjunction with PC's in order to download applications because PDA's are highly mobile and the client can always have access to his/her PDA, as well as to validate an application before downloading it to the PDA, in par. 33, lines 1-30 and par. 163.

As per claim 4:

Muttik et al. and Brody et al. substantially teach the method described in claim 1. Furthermore, Brody et al. teach wherein said software is supplied by a third-party source (par. 33 and par. 86).

As per claim 5:

Muttik et al. and Brody et al. substantially teach the method described in claim 4. Furthermore, Brody et al. teach wherein said third-party software is for execution or other use on a palmtop computer (par. 33 and par. 86).

As per claim 7:

Muttik et al. and Brody et al. substantially teach the method described in claim 1. Muttik et al. also teach a host computer (col. 3, lines 54-62). Furthermore, Muttik et al. teach that the computing environment allows for various computing systems, one of which may be a personal organizer (col. 3, lines 44-49). Not explicitly disclosed is wherein said method operates on a computer system which comprises a portable computing device coupled to said host computer and wherein the validating operation is performed by the host computer for the portable computing device. However, Brody teaches a PDA coupled to a host device for personalization

purposes. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Muttik et al. to have the hand-held device coupled to the host computer in order to carry out different functions on the palmtop computing device. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Brody suggests that PDA's are used in conjunction with PC's in order to download applications because PDA's are highly mobile and the client can always have access to his/her PDA in par. 33, lines 1-30.

As per claim 8:

Muttik et al. substantially teach a method of ensuring the security of an open platform computer system, comprising a validations program residing on the open platform computer system in a secure fashion that is configured for: validating the software by first scanning the software that is loaded in a secure environment (col. 4, lines 4-23); wherein the act of scanning and validating comprises running the code in an emulator for the open platform computer system within the secure environment for the emulator to run in, allowing the execution of the code to be examined for any new malicious routines as well as against known malicious signatures (col. 4, lines 4-23); marking the software as valid or invalid by the use of a flag (col. 4, lines 39-52 and col. 5, lines 15-19); and, denying the software the ability to operate on any environment within the computer system if the validator fails to identify the software as valid in order to ensure the security of said computer system (col. 2, lines 64-67). Although an "open platform" is not specifically discussed, Muttik et al. do not teach that the system is limited to a particular type of software. Muttik et al. teach that any software received and potentially harmful is analyzed, thus

Muttik et al. support an "open platform computer system" for performing the above mentioned steps.

Not explicitly disclosed is wherein said method operates on a computer system which comprises a portable computing device coupled to a host computer, wherein the portable computing device is configured to load software from the host computer to the portable computing device for operating on the portable computing device. However, Brody teaches a PDA coupled to a host device for personalization purposes. Furthermore, Brody et al. teach that one of the steps during the personalization process may be to scan the software before allowing it to be downloaded to the PDA to prevent from downloading an application with malicious code (par. 105). Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Muttik et al. to have the hand-held device coupled to the host computer in order to carry out different functions on the portable device, where one of the functions includes the PDA having a validation program stored in a secure fashion in order to scan the software. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Brody suggests that PDA's are used in conjunction with PC's in order to download applications because PDA's are highly mobile and the client can always have access to his/her PDA, as well as to validate an application before downloading it to the PDA, in par. 33, lines 1-30 and par. 163.

As per claim 9:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 8. Furthermore, Muttik et al. teach wherein said host computer is coupled to a network (col. 3, lines

54-62).

As per claim 10:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 8. Furthermore, Brody teaches wherein the portable computing device is a handheld computing device (par. 33, lines 1-30).

As per claim 11:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 8. Furthermore, Brody teaches wherein the portable computing device is a personal data assistant (par. 33, lines 1-30).

As per claim 12:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 8. Furthermore, Brody teaches wherein the portable computing device is coupled to said host computer by an infrared device (par. 33, lines 25-30).

As per claim 13:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 8. Furthermore, Brody teaches wherein the portable computing device is coupled to said host computer by an RF enabled device (par. 33, lines 25-30).

As per claim 15:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 8. Muttik et al. further teach wherein said validation program is configured to evaluate software and attach a digital "valid" flag if the software is found to be clean of known security compromising routines or attach a digital "invalid" flag to the software if the software is not found to be clean of

known security compromising routines (col. 4, lines 39-52 and col. 5, lines 15-19). Furthermore, Brody et al. teach wherein the software is software supplied by a third-party (par. 33 and par. 86).

As per claim 16:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 15. Brody et al. further teach wherein said portable computing device is configured to load third-party software files with the digital "valid" flag attached and to refrain from loading third-party software files which have no flag attached or have the "invalid" flag attached (par. 33).

As per claim 17:

Muttik et al. and Brody et al. substantially teach the apparatus described claim 15. Furthermore, Brody teaches wherein said portable computing device is a personal data assistant (par. 33, lines 1-30).

As per claim 18:

Muttik et al. substantially teach a method of ensuring the security of an open platform computer system, comprising a validations program residing on the network that is configured for: validating the software by scanning files of the software in a secure environment (col. 4, lines 4-23); wherein the act of scanning and validating comprises running the code in an emulator for the open platform computer system within the secure environment for the emulator to run in, allowing the execution of the code to be examined for any new malicious routines as well as against known malicious signatures (col. 4, lines 4-23); marking the software as valid or invalid by the use of a flag (col. 4, lines 39-52 and col. 5, lines 15-19); and, denying the software the ability to operate on any environment within the computer system if the validator fails to

identify the software as valid in order to ensure the security of said computer system (col. 2, lines 64-67). Although an "open platform" is not specifically discussed, Muttik et al. do not teach that the system is limited to a particular type of software. Muttik et al. teach that any software received and potentially malicious is analyzed, thus Muttik et al. support an "open platform computer system" for performing the above mentioned steps.

Not explicitly disclosed is a handheld computing device coupled to a network, wherein the handheld computing device is configured to load software from the network to the handheld computing device for operation on the handheld computing device and performing the scans upon loading software to any environment of the handheld computing device. However, Brody teaches a PDA coupled to a host computer (which is in a secure networked environment) for personalization purposes. Furthermore, Brody et al. teach that one of the steps during the personalization process may be to scan the software before allowing it to be downloaded to the PDA to prevent from downloading an application with malicious code (par. 105). Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Muttik et al. to have the hand-held device coupled to the host computer in order to carry out different functions on the portable device, where one of the functions includes the PDA having a validation program stored in a secure fashion in order to scan the software. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Brody suggests that PDA's are used in conjunction with PC's in order to download applications because PDA's are highly mobile and the client can always have access to his/her PDA, as well as to validate an application before downloading it to the PDA, in par. 33, lines 1-30 and par. 163.

As per claim 20:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 18. Brody et al. further teach wherein said portable computing device is configured to load third-party software files with the digital "valid" flag attached and to refrain from loading third-party software files which have no flag attached or have the "invalid" flag attached (par. 33).

As per claim 21:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 18. Muttik et al. further teach wherein said validation program is configured to evaluate software and attach a digital "valid" flag if the software is found to be clean of known security compromising routines or attach a digital "invalid" flag to the software if the software is not found to be clean of known security compromising routines (col. 4, lines 39-52 and col. 5, lines 15-19). Furthermore, Brody et al. teach wherein the software is software supplied by a third-party (par. 33 and par. 86).

III. Claims 6, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muttik et al., US Patent No. 6,907,396 and Brody, US Pub. No. 2001/0051928 as applied to claims 1, 8, & 18 above, and further in view of Ginter et al., US Patent No. 6,948,070.

As per claim 6:

Muttik et al. and Brody et al. substantially teach the method described in claim 1. Not explicitly disclosed is wherein said validator program is specially constructed to reside in a secure fashion in the host facility of said computer system. However, Ginter et al. teach the use of a tamper-resistant security barrier which could be included in any component in a network so that processes are ensured to be carried out within a secure environment. Therefore, it would

have been obvious to a person in the art at the time the invention was made to modify the method disclosed in Muttik et al. for the validator program to be contained within a secure environment in order to ensure that it has not been tampered with so that it correctly validates the software/application. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Ginter et al. suggest that it is important to ensure that processes are carried out within a secure environment in col. 59, lines 48-59.

As per claim 14:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 8. Not explicitly disclosed is wherein said validation program resides in said host computer of the computer system in a fashion intended to be secure. However, Ginter et al. teach the use of a tamper-resistant security barrier which could be included in any component in a network so that processes are ensured to be carried out within a secure environment. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the apparatus disclosed in Muttik et al. for the validator program to be contained within a secure environment in order to ensure that it has not been tampered with so that it correctly validates the software/application. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Ginter et al. suggest that it is important to ensure that processes are carried out within a secure environment in col. 59, lines 48-59.

As per claim 19:

Muttik et al. and Brody et al. substantially teach the apparatus described in claim 18. Not explicitly disclosed is wherein said validation program resides in said computer network in a fashion intended to be secure. However, Ginter et al. teach the use of a tamper-resistant security barrier which could be included in any component in a network so that processes are ensured to be carried out within a secure environment. Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the apparatus disclosed in Muttik et al. for the validator program to be contained within a secure environment in order to ensure that it has not been tampered with so that it correctly validates the software/application. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated to do so since Ginter et al. suggest that it is important to ensure that processes are carried out within a secure environment in col. 59, lines 48-59.

**References Cited, Not Used*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US Patent No. 6,694,436
2. US Patent No. 5,953,502
3. US Patent No. 7,080,407
4. US Patent No. 6,981,279
5. US Patent No. 6,481,632 – cited in reference to an "open platform" architecture/system

The above references have been cited because they are relevant due to the manner in which the invention has been claimed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nadia Khoshnoodi whose telephone number is (571) 272-3825. The examiner can normally be reached on M-F: 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Nadia Khoshnoodi/
Examiner, Art Unit 2437
3/2/2010

NK

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437